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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,242	02/18/2004	Bernd J. Mathiske	30014200-2045	5223
58328 7590 12/18/2009 SUN MICROSYSTEMS C/O SONNENSCHN NATH & ROSENTHAL LLP P.O. BOX 061080 WACKER DRIVE STATION, WILLIS TOWER CHICAGO, IL 60606-1080				
EXAMINER				
ZHE, MENG YAO				
ART UNIT		PAPER NUMBER		
2195				
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12/18/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/782,242

**Applicant(s)**

MATHISKE ET AL.

**Examiner**

MENG YAO ZHE

**Art Unit**

2195

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 8-20 and 22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-20, and 22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1-6, 8-20, and 22 are presented for examination.

***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/30/2009 has been entered.

***Claim Rejections - 35 USC § 112***

3. Claims 1-6, 8-20, and 22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

More specifically, as per claim 1, although the specification teaches concurrent tasks and how they operate, the specification does not indicate how concurrent determination and manipulation occur (lines 6, 10). The rest of the claims have the same deficiencies.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-6, 12-14, 20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moor et al., Patent No. 7,171,663 (hereafter Moor) in view of Nitz et al., Patent No. 6,370,590 (hereafter Nitz) further in view of Hickman, Patent No. 6,173,332 (hereafter Hickman).

5. Moor and Nitz were cited in the previous office actions.

6. As per claims 1, 12, and 20, Moor teaches substantially a method of processing platform-specific events by a virtual machine (Fig 1, unit 140) that operates on a first platform, wherein said virtual machine concurrently supports a first and a second task, said method comprising:

receiving, by a virtual machine, a plurality of platform-specific events which are associated with the first platform (Column 5, lines 5-7; Column 1, lines 10-20);

one of said first and second tasks responds to the platform-specific event, wherein said responding is performed when said first and second tasks are concurrently supported by said virtual machine (Column 4, lines 43-67);

processing each of said platform-specific event (Column 6, lines 34-35).

Moor does not teach specifically concurrently determining which of said first and second tasks should receive each of said platform-specific event and simultaneously manipulating each of said the platform-specific events to comply with a data structure format supported by said selected task, thereby to represent said platform specific event in a form that is accessible by said selected task.

However, Nitz teaches selecting one of said first and second tasks as a selected task for receiving said platform-specific event (Column 7, lines 22-39) and manipulating the platform-specific event by modifying its data structure to be compliant with a data structure format supported by said selected task, thereby to represent said platform specific event in a form that is accessible by said selected task (Abstract; Column 7, lines 40-55) for the purpose of bridging communication between applications each using different event formats.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to combine the inventions of Moor, where the task itself in the virtual machine has to respond to the platform-specific event, with using the event control device in the virtual machine so that the event control device may select which task is to process the event and manipulating the platform-specific event by modifying

its data structure to be compliant with a data structure format supported by said selected task, thereby to represent said platform specific event in a form that is accessible by said selected task, as taught by Nitz, because it allows for the selection of the correct task to receive an event that it is intended for.

Nitz does not specifically teach concurrently determining which tasks should receive each of the events and simultaneously manipulating the events.

However, since multi-threading is commonly used as a way to achieve concurrent processing for the purpose of speed optimization at the time of the applicant's invention, as also shown by Moore (Column 4, lines 15-40), it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Nitz with providing multiple threads, each capable of the selection and the manipulation steps, such that the selection and the manipulation may be achieved concurrently.

7. As per claims 2, 13, and 14, Moor teaches wherein said method further comprises: providing an event-repository (Column 5, lines 18-22) and an event-handler for said selected task (Column 4, lines 43-44); and placing said platform-specific event in said event-repository; invoking said event-handler to initiate processing of said platform-specific event; and processing, by said event-handler, said platform-specific event (Column 4, lines 64-67; Column 5, lines 2-7, lines 19-22; Column 6, lines 34-35).

8. As per claim 3, Moor in view of Nitz substantially teaches wherein said event-handler is implemented as an event-handler thread (Moor: Column 5, lines 32-39, lines 46-50), and wherein said selection is performed by an event-manager thread (Moor: Column 1, lines 50-60).

Moor in view of Nitz does not specifically teach wherein said event-repository is implemented as a first-in first-out queue.

However it would have been obvious to use a first-in-first-out queue to implement said event-repository since it is obvious to one having ordinary skill in the art of tasks and events queuing to use a first-in-first-out queue to store and sequence events so that they may be processed in an orderly manner.

9. As per claim 4, Moor teaches wherein said platform-specific event is manipulated to be associated with a Java compliant data structure (Column 1, lines 28-29).

10. As per claim 5, Moor teaches wherein said manipulating of said platform-specific event is performed by said virtual machine (Column 2, lines 45-47).

11. As per claims 6 and 22, Moor teaches wherein said selected task is a Java compliant MIDlet (Column 1, lines 28-29).

12. Claims 8-11 and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moor et al., Patent No. 7,171,663 (hereafter Moor) in view of Nitz et al., Patent No. 6,370,590 (hereafter Nitz) further in view of Gershman et al., Patent No. 6,199,099 (hereafter Gershman).

13. Gershman was cited in the previous office action.

14. As per claim 8, Moor in view of Nitz does not specifically teach a foreground task.

However, Gershman teaches a mobile system that has task running in the foreground for the purpose of interacting with a user for performing various tasks (Column 2, lines 14-17).

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to combine the teachings of Moor in view of Nitz, where virtual machine may select which task is to receive its intended event, with the specifics of the task has to be a foreground task, as taught by Gershman, such that in the case that an event is for a foreground task, this task may be properly selected by the virtual machine to receive the event, because it allows the interaction with a user for performing various tasks.



15. As per claims 9 and 17, Moor teaches wherein said selected task is a Java compliant MIDlet (Moor: Column 1, lines 28-29). Moor in view of Nitz further in view of Gershman teaches wherein said selection comprises: selecting a foreground task when said selection is made (Gershman: Column 2, lines 14-17).

16. As per claims 10 and 15, Gershman teaches wherein said selecting said foreground tasks comprises: selecting a task that is displayed for the user (Fig 19, units 1900, 1997; Column 2, lines 56-57; Column 4, lines 35-37).

17. As per claims 11 and 16, Gershman teaches wherein said first platform includes a mobile device (Column 1, lines 20-25).

18. As per claim 18, Moor in view of Nitz substantially teaches a method of processing platform-specific events by a virtual machine that operates on a first platform, wherein said virtual machine concurrently supports a first and a second task on said first platform, said method comprising: receiving, by a virtual machine, a plurality of platform-specific event, wherein the platform-specific event is associated with a first platform; determining, by said virtual machine, which one of said first and second tasks is to receive the event, and processing, by the selected task, said platform-specific event and concurrently selecting one of said first and second tasks as a selected task

for receiving said platform-specific event and manipulating the platform-specific event by modifying its data structure to be compliant with a data structure format supported by said selected task, thereby to represent said platform specific event in a form that is accessible by said selected task (Please see claim 1 rejection).

Gershman teaches the specifics of the task selected has to be a foreground task and determine which one of said first and second tasks is the task displayed (Fig 19, units 1900, 1997; Column 2, lines 56-57; Column 4, lines 35-37).

19. As per claim 19, Gershman teaches wherein said virtual machine operates on a mobile device and wherein the task is a foreground task (Column 2, lines 14-17). Moor teaches wherein the task is a Java complaint MIDlet (Column 1, lines 28-29).

### ***Response to Arguments***

20. Applicant's arguments filed on 9/30/2009 have been fully considered but are not persuasive.

21. In the remark, the applicant argued that:

- i) Moor in view of Nitz does not specifically teach concurrently selecting which events are sent to tasks and simultaneously manipulating the events.

22. The Examiner respectfully disagrees with the applicant. As to point:

i) The applicant is not specific as to what he means by currently and simultaneously performing those steps above, so the Examiner has interpreted the claim to mean using multiple threads to perform the steps above so that concurrency may be achieved. since multi-threading is commonly used as a way to achieve concurrent processing for the purpose of speed optimization at the time of the applicant's invention, as also shown by Moore (Column 4, lines 15-40), it would have been obvious to one having ordinary skill in the art at the time of the applicant's invention to modify the teachings of Nitz with providing multiple threads, each capable of the selection and the manipulation steps, such that the selection and the manipulation may be achieved concurrently.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MENGYAO ZHE whose telephone number is (571)272-6946. The examiner can normally be reached on Monday Through Friday, 7:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/  
Supervisory Patent Examiner, Art Unit 2195

/MengYao Zhe/